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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,928	03/30/2004	Tomomi Tateishi	1330-0139PUS1	2905

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EXAMINER	
SUCH, MATTHEW W	

ART UNIT	PAPER NUMBER
2891	

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/811,928	TATEISHI, TOMOMI	
	Examiner	Art Unit	
	Matthew W. Such	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *30 March 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 7 April 2006. These drawings are acceptable.

Specification

2. The disclosure is objected to because of the following informalities: the word "promotor" on Page 12, Line 20 should read "promoter".

Appropriate correction is required.

Claim Objections

3. Claim 13 is objected to because of the following informalities: the phrase "formed on a support icy formed" in Line 3 of the claim is unclear. The examiner interprets the phrase to by "formed on a support formed". Appropriate correction is required.

4. Claim 21 is objected to because of the following informalities: the phrase "tile thickness" in Line 5 of the claim is unclear. The examiner interprets the phrase to be "the thickness". Appropriate correction is required.

5. Claims 1, 7, 13 and 19 are objected to because the phrase "said organic layer has a glass transition temperature of from 40°C to the flow-starting temperature of +40°C" is unclear since the temperature of 40°C and +40°C are the same. For the purposes of examination, the examiner

interprets the claim in light of the specification Page 22, Lines 18-19, wherein the applicant states that "the organic layer or high-molecular weight components therein have glass transition temperatures or flow-starting temperatures of higher than 40°C". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 7 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The phrase "organic layer formed on a support formed on a plate" in claims 7 and 13 are not supported by the specification (note that the underlined words were amended to the claim). The specification refers to an organic layer on a support ***or*** a plate (see for example Page 3, Line 21 and 25; Page 21, Line 3, 6 and 21; Page 22, Line 26 and 28; Page 23, Line 7, 8, 12 and 14; Page 24, Line 21 and 23; Page 25, Line 4, 12 and 26; etc.). Applicant is invited to identify the specific page and line number that discloses an organic layer formed on a support formed on a plate.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 3, 7, 9, 13, 15, 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Regarding claims 1, 3, 7, 9, 13, 15, 19 and 21, the phrase "assuming that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Official Notice

11. Official notice is taken that the coefficient of linear thermal expansion for ITO is less than 20 ppm / degree Celsius. This fact is taken from US Patent 4,744,637 to Sekimura (Col. 3, Lines 7-15).

12. Official notice is taken that the glass transition temperature of PVK greater than 40 degrees Celsius. This fact is taken from Zhang (Appl. Phys. Lett., v. 72, pp. 2948, right col.)

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. In so far as definite, claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nirmal (`560).

15. Regarding claims 1 and 7, Nirmal (`560) teaches a method for producing an organic electroluminescent device (Paragraph 0014) using a transfer material having at least one organic layer (Elements 116, 118, 114, 212, 214, 216) formed on a support or plate (Elements 110, 210) each with a surface which supports the transferred organic layer.

The support or plate can have a pattern (Paragraph 0067).

The transfer material is superposed on a first substrate (Elements 220) having a conductor electrode formed thereon (Element 222; Paragraph 0064).

The organic layer faces the conductor electrode on the first substrate (Fig. 2a and 2b). Heat and pressure are applied forming a laminate (Paragraphs 0006, 0008, 0016-0026, 0067 and 0076-0078).

The support is peeled from the laminate so that the organic layer (Elements 116, 118, 114, 212, 214, 216, 234 and 236) is transferred onto the first substrate via the conductor electrode (Paragraph 0067; Fig. 2b).

Regarding the maximum surface roughness limitation, the claim language states that the Rmax of 0 to 50 is obtained from a ratio of a maximum surface roughness Rmax (nm) of said first substrate to the thickness (nm) of said organic layer assuming that the thickness of said organic layer is 100. The manner in which the claim is written does not limit that the surface roughness of the first substrate be 0 to 50 every case, but only when the assumption is made that the organic layer is 100 thick. Since the organic layer can be a thickness different than 100 nanometers, then the surface roughness of 0 to 50 does not differentiate the claim from Nirmal (Paragraphs 0027, 0045, 0051, 0072-0080).

The organic layer can contain materials such as PVK or polyimide, which each have a glass transition temperature greater than 40 degrees Celsius (Paragraph 0048 and 0055).

16. Regarding claims 2 and 8, Nirmal further teaches forming a second substrate as having an electrode as layers of calcium and aluminum on the organic layer on the first substrate (Paragraph 0080).

17. Regarding claims 3 and 9, the claim language states that the Rmax of 0 to 50 is obtained from a ratio of a maximum surface roughness Rmax (nm) of said first substrate to the thickness (nm) of said organic layer assuming that the thickness of said organic layer is 100. The manner in which the claim is written does not limit that the surface roughness of the first substrate be 0 to 50 every case, but only when the assumption is made that the organic layer is 100 thick. Since the organic layer can be a thickness different than 100 nanometers, then the surface roughness of 0 to 50 does not differentiate the claim from Nirmal (Paragraphs 0027, 0045, 0051, 0072-0080).

18. Regarding claims 4 and 10, Nirmal further teaches a first substrate can be made of indium-tin-oxide (ITO), which each has a linear expansion coefficient of 20 ppm / degrees Celsius or less (Paragraph 0071).

19. Regarding claims 5-6 and 11-12, Nirmal further teaches a flat layer (Element 112; Paragraphs 0029-0035) is formed with a thermosetting organic compound (Paragraph 0033).

20. Regarding claims 13-24, it is noted that product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Nirmal teaches the structure as implied by the steps in claims 14-18 and 20-24.

Response to Arguments

21. Applicant's arguments filed 7 April 2006 regarding 35 U.S.C. 112, first paragraph rejections of claims 1, 3, 7, 9, 13, 19 and 21 have been fully considered but they are not persuasive. The phrase "assuming that" does not define the claim it is unclear whether the limitation is part of the invention. For example, the thickness of the organic layer is not required

to be 100, but only assumed to be 100. An assumption does not make the organic layer have a particular thickness. See MPEP § 2173.05(d).

22. Applicant's arguments with respect to 35 U.S.C. 103(a) rejections of claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Such whose telephone number is 571-272-8895. The examiner can normally be reached on Monday - Friday 8AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley W. Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew W. Such
Examiner
Art Unit 2891

MWS
6/6/06

DAVID ZARNEKE
PRIMARY EXAMINER
6/11/06